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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/774,637	02/09/2004	Ghassem Zarbi	3218		
7590 05/31/2006			EXAM	EXAMINER	
Adam H. Jacobs			HUSBAND,	HUSBAND, SARAH E	
Suite 726 1904 Farnam Street			ART UNIT	ART UNIT PAPER NUMBER	
Omaha, NE 68102			1746	1746	
			DATE MAILED: 05/31/2006	DATE MAILED: 05/31/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/774,637	ZARBI ET AL.	
Office Action Summary	Examiner	Art Unit	
	Sarah E. Husband	1746	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	l. ely filed the mailing date of this communication. O (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 16 M 2a) This action is FINAL. 2b) This 3) Since this application is in condition for allowed closed in accordance with the practice under M	s action is non-final. nce except for formal matters, pro		
Disposition of Claims			
4) ☐ Claim(s) 1-11 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-11 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.		
Application Papers			
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on <u>09 February 2004</u> is/ar Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the E	re: a) ☐ accepted or b) ☑ objected or b) ☑ objected drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicati ority documents have been receive u (PCT Rule 17.2(a)).	on No d in this National Stage	
Attachment(s)    Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:		

#### **DETAILED ACTION**

## Response to Arguments

With respect to the amendments to the drawings and specification, these were not received with the Remarks filed on 3/16/2006. Therefore, the objections are maintained until receipt of these documents.

Applicant's arguments, see Remarks, filed 3/16/2006, with respect to the rejection(s) of claim(s) 1-4 under 35 USC 103(a) have been fully considered and are persuasive in light of the amendments. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lenhardt (US 4347978) or Shikamori (US 5012658).

Applicant's arguments filed 3/16/2006 with respect to claims 5-11 have been fully considered but they are not persuasive. As was described in the previous office action, King discloses an engine cooling system which would provide direct cooling air across the motor. Air which is blown on the motor, would be considered direct cooling.

The rejection stands as follows.

## **Drawings**

The drawings are objected to under 37 CFR 1.83(a) because they fail to show Item 22 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures.

Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Specification

The disclosure is objected to because of the following informalities: page 12, line 24 describes an air deflection plate (18), which is also listed as (28) in line 27 and the inner edge (22) is not shown in the drawings.

Appropriate correction is required.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the

subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shikamori (US Patent No. 5,012,658) in view of Hummel (DE 4022073 C1) or Schmidt (DE 4241804 A1).

Shikamori discloses a washing machine having a motor, cooling fan being attached to a pulley to cool a motor and belts connecting the pulley (Fig. 1, 2, Items 15, 15b, 17a, 17c; see col. 4-5). This is considered as a pressure washer because there is a force of the water coming into the washer would provide a pressure washer. Shikamori does not specifically disclose the spokes supporting the outer rim in a spaced relation from the central hub. However, Hummel or Schmidt teaches fan blades inside the rims of the pulleys (abstract, Fig. 1; abstract, Fig. 3, respectively). Hummel or Schmidt also discloses the fan blades being angled shown in the drawings or specifications. The design of fan blades is well known and one of ordinary skill in the art would readily foresee using a common angled fan blade in the design, especially in Schmidt where angled fan blades with curvature are clearly shown in Figure 3. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Shikamori with Hummel or Schmidt for the benefit of a more compact, simplistic design for cooling the motor.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lenhardt (US 4347978) in view of Hummel (DE 4022073 C1) or Schmidt (DE 4241804 A1).

Lenhardt discloses a pressurized sprayer having an improved cooling fan mechanism with a pulley rotatably mounted within the washer and driven by a motor (Fig. 6, Items 75, 105; see entire document). Although the apparatus is not specifically stated as a cleaning apparatus, in apparatus claims, the claimed structure must be patentably distinct. Lenhardt also discloses a fan with blades attached to the motor which forces air through the motor in order to cool the motor (Fig. 6, Item 103). Lenhardt does not specifically disclose the fan integral with the pulley mechanism. However, Hummel or Schmidt teaches fan blades inside the rims of the pulleys (abstract, Fig. 1; abstract, Fig. 3, respectively). Lenhardt, Hummel or Schmidt also discloses the fan blades being angled shown in the drawings or specifications. The design of fan blades is well known and one of ordinary skill in the art would readily foresee using a common angled fan blade in the design, especially in Schmidt where angled fan blades with curvature are clearly shown in Figure 3. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Lenhardt with Hummel or Schmidt for the benefit of a more compact, simplistic design for cooling the motor.

Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (US Patent No. 3,341,081) in view of Hummel or Schmidt and further in view of Erickson (US Patent No. 4,851,017).

King discloses a spraying apparatus having a motor, pulley, water pump, drive belt and a housing enclosing the structure (See Fig. 1). King does not specifically disclose the drive pulley including a cooling fan mechanism. Hummel and Schmidt both disclose fan

blades inside of a drive pulley (see Abstracts and Fig. 1 (Schmidt), Fig. 2, 3 (Hummel)). King also does not specifically describe air inlets and air outlets. However, Erickson discloses a fan cooling a motor and the air inlets and outlets (Fig. 1, air flow indicated by arrows). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify King with Hummel or Schmidt (see abstracts and figures) and also with Erickson (col. 1, ll. 45-55) for the benefit of a more compact and simplistic design and also for the benefit of quickly cooling the motor.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over King,

Hummel or Schmidt, and Erickson as applied to claims 5-10 above, and further in view of

Applicant's Specification.

King, Hummel or Schmidt, and Erickson disclose the apparatus shown above in the 103(a) rejection. They do not disclose a center air-seal disk. However, Applicant discloses in the specification (page 5, ll. 16-18) that a properly designed hub will have a central air-seal disk and therefore it would be obvious to modify King, Hummel or Schmidt, and Erickson with the seal in order for the fan to operate properly.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art not disclosed are Occhiogrosso (US 6360964), Stutsman (US 5769579), and Miller (US 4468457), who disclose pulley driven pressure washers or engine cooling means with integral fan and pulley.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah E. Husband whose telephone number is (571) 272-8387. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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SEH

MICHAEL BARR ERVISORY PATENT EXAMINER